

Amendments to the Specification

Please amend page 1, the first paragraph, as follows:

The present invention relates to a multi-tap, particularly to a ~~multifunctional multi-tap (concent)~~ of intercepting a stand-by electric power ~~multifunctional outlet strip for intercepting a stand-by electric power~~ and a control method employing the same, wherein an interlocking control and a single-acting control (separate control) are performed in accordance with the subordination of electrical appliances by using an illumination sensor or a body-detecting sensor, the introduction of over current or surge current is avoided, and the current capacity which is different according to the electric appliances is detected to adjust the capacity of the ~~multi-tap (concent)~~ outlet strip to comply with the capacity of the appliance.

Please amend page 2, paragraphs 2-4 (ending on page 3), as follows:

FIG. 1 shows the construction of a power supply system for an electric appliance 200. As shown, an electric energy is supplied to an appliance by connecting a plug 200 of the appliance to an alternating current power or a general outlet 100. In most cases, the appliance is ~~used by being~~ continuously connected with the power due to the inconvenience ~~in~~ of blocking the power.

Accordingly, due to such ~~leakage of current~~ continuous connection, electric power has been consumed unnecessarily and there exists a possibility of a big fire. The total sum of the wasted electric power nationwide is considerable.

In order to overcome such problem caused due to the current leakage of an appliance, a multi-type standby current intercepting multi-tap has been rolled out. This type of ~~multi-tap~~ outlet strip detects ~~the state~~ whether or not a user operates a computer by using the clock signal and the data signal of a mouse and a keyboard, which are the input devices of a computer. If it is determined that the computer is not being used, the power is ~~intercepted~~ not to be supplied to the peripherals.

Please amend page 3, second and third paragraphs, as follows:

To avoid the current leakage, a outlet including a control module for interlocking the mainframe and the peripherals of a computer is also used. Herein, according to the interlocking

control, the main frame of a computer is connected to the ~~main lead-in hole~~main outlet and the peripherals (for example, a printer and a monitor) are connected to the ~~auxiliary lead-in holes~~auxiliary outlets. Thus, if the mainframe of the computer is turned off, the multi-tap detects and intercepts the standby power ~~not to be~~ supplied to the peripherals so that the ~~wasted~~ power can be saved.

On the contrary, according to the single-acting control, appliances are individually connected to the ~~auxiliary lead-in holes~~auxiliary outlets regardless of the ~~main lead-in hole~~main outlet, and the multi-tap detects and supplies/intercepts the standby electric power. Hereinafter, the interlocking control and the single-acting control will be described ~~as the aforementioned~~ meaning.

Please amend page 4, second and third paragraphs, as follows:

Also, the above conventional multi-tap has the problem in that it does not work ~~its own function~~ (i.e., the interlocking control) if the current capacity is used for different appliances at the same time.

SUMMARY OF THE INVENTION

The present invention is provided to overcome the foregoing stated problem which the prior art contains. It is the primary object of the present invention to provide a ~~multifunctional multi-tap (concent)~~ of intercepting a stand-by electric power ~~multifunctional outlet strip for intercepting a stand-by electric power~~ and a control method employing the same, wherein an illumination sensor or a body-detecting sensor automatically detects the time period when electric power does not need to be supplied to an appliance such as a television or a monitor, which does not need the constant supply of electric power, and the power of the appliance is turned on/off according to the detected signal, so that unnecessary leakage of electric power can be avoided and a fire caused from the leakage current can be prevented.

Please amend page 5, paragraphs 1-4 (ending on page 6) as follows:

It is another object of the present invention to provide a ~~multifunctional multi-tap (concent)~~ of intercepting a stand-by electric power ~~multifunctional outlet strip for intercepting a~~

stand-by electric power and a control method employing the same, ~~wherein the illumination sensor or the body detecting sensor makes the interlocking control of an appliance and its subordinated appliances.~~

It is another object of the present invention to provide a ~~multifunctional multi-tap (concent)~~ multifunctional outlet strip for intercepting a stand-by electric power and a control method employing the same, wherein the current capacity is adjusted according to the appliances, which have their own current capacities, so that the outlet is compatible with different appliances.

It is another object of the present invention to provide a ~~multifunctional multi-tap (concent)~~ outlet strip for intercepting a standby electric power and a control method employing the same, wherein according to the on/off state of a main appliance such as the mainframe of a computer, the powers of the peripheral appliances interlocked with the main appliance are switched on/off, and further, apart from the interlocking control, the user can operate the appliances individually by his/her selection.

In order to achieve the above objects of the present invention, a ~~multifunctional multi-tap (concent)~~ multifunctional outlet strip for intercepting a stand-by electric power comprises: an over-current circuit breaker for detecting and intercepting an over-current or a surge current generated due to ~~an disorder~~ a malfunction of an appliance; a power section for generating and outputting a motion voltage which is supplied to the parts inside of the ~~multi-tap (concent)~~ outlet strip through ~~the~~ a rectification, smoothing and voltage regulation process; a motion condition setting part in which a user switches and sets ~~the condition~~ whether or not a sensor is used and whether an interlocking control or a single acting control is adopted, and which outputs the switching signal; a sensor part for detecting a light or a body motion and outputting a signal accordingly; a current detecting part for detecting a current flowing into an interacting or a single-acting appliance and outputting the detected signal; a control part which receives the user's switching signal for the selection of the interlocking/single-acting function and the detected signal, determines the detected signal of the sensor, and outputs an on/off control signal for ~~controlling~~ switching the appliances, which is ~~led into each lead in hole, as~~ are plugged into each outlet, in a standby state or a power-saving state according to the interlocking or single-acting ~~condition~~ function; and an output control part which receives the

on/off control signal of the control part and supplies/intercepts the power current flowing into each lead-in holes.

Please amend the last paragraph on page 6, ending on page 7, as follows:

Also, ~~A~~ a control method for a multifunctional multi-tap (concent) of intercepting a stand-by electric power multifunctional outlet strip for intercepting a stand-by electric power comprises the steps of: a) determining whether there is a change in light ~~by using~~ a sensor; b) setting a ~~main lead-in hole~~ main outlet ~~as into~~ a standby state, in case that if there is a change in light ~~as a result of the determination detected by the sensor~~; c) determining which auxiliary lead-in hole is interlocked or single-acted; d) determining whether or not the ~~main lead-in hole~~ main outlet is currently used, ~~in case that if~~ a predetermined number of auxiliary lead-in holes auxiliary outlets ~~are interlocked as a result of~~ determined to be interlocked in step (c); e) turning on all of the predetermined number of the interlocked ~~auxiliary lead-in holes~~ auxiliary outlets ~~in case that if~~ the main lead-in hole main outlet is currently used ~~as a result of step (d)~~; f) turning off all of the predetermined number of the interlocked ~~auxiliary lead-in holes~~ auxiliary outlets ~~in case that if~~ the main lead-in hole main outlet is not currently used as a result of step (d); and g) turning off all of the predetermined number of the single-acted ~~auxiliary lead-in holes~~ auxiliary outlets, in case that a predetermined number of ~~auxiliary lead-in holes~~ auxiliary outlets ~~are single-acted as a result of~~ determined to be single-acted in step (c).

Please amend page 7, second full paragraph, as follows:

FIG. 2 is a block diagram showing the construction of a ~~multifunctional multi-tap (concent) of intercepting a stand-by electric power~~ multifunctional outlet strip for intercepting a stand-by electric power according to the present invention.

Please amend page 8, paragraphs 1-4 (ending on page 9), as follows:

FIGS. 3-8 are detail circuit diagrams showing each part of the multifunctional ~~multi-tap (concent)~~ outlet strip of saving electric power of FIG. 2.

FIG. 9 is a motion flow chart showing a control method of the ~~multifunctional multi-tap (concent) of intercepting a stand-by electric power~~ multifunctional outlet strip for intercepting a

stand-by electric power according to the present invention, if an illumination sensor is used.

FIG. 10 is a motion flow chart showing a control method of the ~~multifunctional multi-tap (concent)~~ of intercepting a stand-by electric power multifunctional outlet strip for intercepting a stand-by electric power according to the present invention, if an illumination sensor and a body-detecting sensor are used at the same time.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Hereunder, with reference to the attached drawings, a preferred embodiment is illustrated for the ~~multifunctional multi-tap (concent)~~ of intercepting a stand-by electric power multifunctional outlet strip for intercepting a stand-by electric power and a control method employing the same according to the present invention, in which an illumination sensor or a body-detecting sensor detects whether there is a change in light or whether there is a person around each of the lead-in holes under the interlocking or single-acting control; the detected signal supplies or intercepts the commercial alternating current applied to each lead-in hole according to the interlocking or single-acting control condition; the current value of respective appliances is selectively adjusted so that the ~~multi-tap (concent)~~ outlet strip can be compatible with the appliances with different current capacity.

Please amend page 9, first and second paragraphs (ending on page 10) as follows:

FIG. 2 is a block diagram showing the construction of a ~~multifunctional multi-tap (concent)~~ of intercepting a stand-by electric power multifunctional outlet strip for intercepting a stand-by electric power according to the present invention.

As shown, the ~~multifunctional multi-tap (concent)~~ of intercepting a stand-by electric power multifunctional outlet strip for intercepting a stand-by electric power according to the present invention comprises: an over-current interceptor 1 for intercepting or supplying a commercial alternating current by detecting the over-current or surge current flowing into an appliance due to a ~~disorder of an~~ malfunction of the appliance; a power part 2 for generating and outputting a motion voltage, which is to be provided from a commercial alternating current power to each part of the ~~multi-tap (concent)~~ outlet strip through the rectification, smoothing and voltage regulation process, and a clock signal for driving a timer built in a control part 6, which

will be described below; a motion condition setting part 3 for setting the condition according to a user's switching operation regarding whether or not a sensor is used and whether appliances are interlocked or single-acted, and outputting a switching signal accordingly; a sensor part 4 for detecting an illuminance or body motion and outputting a signal accordingly; a current detecting part 5 for detecting a current flowing into an interlocked or single-acted appliance and outputting a signal accordingly; a control part 6 which receives the switching signal and the detection signal, ~~determines the detection signal of the sensor part 4,~~ and outputs an on/off control signal for controlling an appliance, which is lead in each lead-in hole according to the interlocking or single-acting condition, with the standby or power-saving state; and an output control part 7 for supplying or intercepting current flowing into each appliance according to the on/off control signal of the control part 6.

Please amend page 10, paragraphs 3-5 (ending on page 11), as follows:

The ~~multifunctional multi-tap (concent)~~ of intercepting a stand-by electric power multifunctional outlet strip for intercepting a stand-by electric power according to the present invention operates as follows.

First, the over-current interceptor 1 intercepts or supplies a commercial alternating current power by detecting the over-current or surge current flowing into an appliance due to a disorder of an appliance.

The power part 2 generates a motion voltage, which is to be provided from a commercial alternating current power to each part of the ~~multi-tap (concent)~~ outlet strip through the rectification, smoothing and voltage regulation process. Herein, the motion voltage generated by the power part 2 is mainly the direct current voltage of 5V to 12V, and the 12V is used for the power of each relay RY1-RY6 built in the output control part 7 and 5V is used for the powers of the parts other than the above relays.

Please amend page 11, second paragraph, as follows:

The motion condition setting part 3 sets the condition according to a user's switching operation regarding whether or not a sensor is used and whether appliances are interlocked or single-acted, and outputs the switching signal to the control part 6. Herein, the interlocking

condition can be set so that while a main appliance such as a mainframe of a computer is being connected to the ~~main lead-in hole~~main outlet CON1, the appliances interlocked with the main appliance such as the peripherals of a computer can be supplied with or blocked from the power.

Please amend page 12, first paragraph, as follows:

If the user desires to use a television or an audio individually apart from the appliances which are set by the above interlocking condition and connected to the ~~auxiliary lead-in holes~~auxiliary outlets, the user can set a single-acting condition by a simple switching operation for the television or the audio.

Please amend page 13, paragraphs 1-4 (ending on page 14) as follows:

The control method of the ~~multi-tap (concent)~~outlet strip according to the present invention will be detailedly explained in the description regarding FIGS. 9 and 10.

The output control part 7 supplies or intercepts the current flowing into each appliance according to the on/off control signal of the control part 6. Herein, the output control part 7 can be implemented with a relay devices and supplies or intercepts the power to each appliance according to its own on-off state.

FIGS. 3-8 are detail circuit diagrams showing each part of the ~~multifunctional multi-tap (concent) of intercepting a stand-by electric power~~multifunctional outlet strip for intercepting a stand-by electric power of FIG. 2.

FIG. 3 is a detail circuit diagram showing the over-current interceptor and the power part according to FIG. 2.

Please amend page 14, paragraphs 2-4 (ending on page 15), as follows:

The power part 2 converts the commercial alternating current power into a direct current power and supplies the same to each part of the ~~multi-tap (concent)~~outlet strip.

Specifically, the commercial alternating current power is ~~down-transformed~~stepped down into a predetermined alternating current voltage through a step-down transformer. Next, the alternating current voltage is full-wave rectified through a bridge circuit formed with 4 diodes D1-D4. The full-wave rectified alternating current voltage is smoothed through a capacitor to be

a direct current voltage of 12V. The 12V direct current voltage is used as an operating voltage for driving the relay devices of the output control part 7.

Also, the direct current voltage of 12V is ~~down-transformed~~stepped down into the one of 5V through a constant voltage circuit and used for operating the microprocessor of the control part 6, the motion condition setting part 3, and the illuminance sensor and the body-detecting sensor of the sensor part 4.

Please amend page 15, first paragraph, as follows:

Meanwhile, the power part 2 generates a clock signal for driving the timer (not shown) built in the control part 6. In other words, the alternating current voltage which was ~~down-transformed through the down-transformer~~stepped down through the step-down transformer, generates an on-off signal through a transistor Q3, and the on/off signal is used as a clock signal for driving the timer built in the microprocessor of the control part 6.

Please amend page 15, paragraphs 3-5 (ending on page 16), as follows:

As shown, the motion condition setting part 3 consists of an array resistor RA1 and switches SW1-SW6. The switches SW1-SW6 are disposed outside of an outlet so that a user can choose whether the appliance corresponding to each of the ~~auxiliary lead-in holes~~auxiliary outlets CON2-CON6 is used in the interlocking condition or the single-acting condition.

Herein, if the ~~main lead-in hole~~main outlet CON1 is connected by an appliance, the on signal transferred from a terminal CT1 is inputted to the control part 6 so that the control part 6 perceives that the ~~main lead-in hole~~main outlet CON1 is being used.

On the contrary, if the ~~main lead-in hole~~main outlet CON1 is not connected by any appliance, the off signal outputted from the terminal CT1 is transferred to the control part 6 so that the control part 6 perceives that the ~~main lead-in hole~~main outlet CON1 is not being used. Thus, in this case, the ~~multi-tap (concent)~~outlet strip works under only single-acting control, not interlocking control.

Please amend page 16, paragraphs 1-3 (ending on page 17), as follows:

If the ~~main lead-in hole~~main outlet CON1 is connected by an appliance, i.e., if an on signal is inputted to the terminal CT1, the user can select the interlocking or single-acting alternatively regarding each appliance corresponding to the auxiliary lead-in hole. CON2-CON6 by turning on/off the switches SW1-SW5. Of course, the on/off signals of the switches SW1-SW5 are transferred to the microprocessor of the control part 6 so that the control part 6 can perceive which ~~auxiliary lead-in holes~~auxiliary outlets are interlocking controlled or single-acting controlled.

The switch SW6 is disposed outside of the ~~multi-tap (concent)~~outlet strip so that the user can select whether the switch should use an illumination sensor or use an illumination sensor and a body-detecting sensor at the same time. In this event, of course, the on/off signals corresponding to the above two options are transferred to the microprocessor of the control part 6 so that the control part 6 can determine whether to receive a signal from only the illumination sensor or both the illumination and body-detecting sensors.

Herein, after the control part 6 perceives the sensor to transfer the signal according to the on-off signal of the switch SW6, if no change of illumination or no movement of a human body is detected from the sensors, the timer built in the control part 6 is operated to ~~control the switch~~each outlet to the standby state or the power saving state. The operation time of the timer can be variably set at the initial manufacturing stage.

Please amend page 18, first and second paragraphs, as follows:

Thereafter, the comparator U2 computes the difference between the resistance of the illumination CDS sensor and the reference resistance, and a signal according to the computation is inputted to a transistor Q5. The signal inputted to the transistor Q5 is converted into an on/off control signal and transferred to the control part 6 through a terminal CDS. Thus, the control part 6 determines a change of illuminance by the signal detected by the illumination sensor. According to the change of illuminance, electric power is supplied or intercepted to each interlocked or single-acted appliance so that the outlet can be ~~controlled with~~switched into a standby state or a power saving state.

The difference computed from the comparator U2 is amplified through the transistor.

According to the signal corresponding to the difference, a display LD1 glows or flashes. Herein, the flashing of the display LD1 represents the change of illuminance, i.e., the ~~multi-tap~~ ~~(concent)~~ outlet strip is ~~in the illuminance state to be induced~~ illuminated to a power saving or standby state.

Please amend page 19, second full paragraph, and third paragraph, as follows:

However, as described above, the present invention is confined to only the case where the on signal is inputted from the terminal ON/OFF. That is, the present invention will be described on the assumption that the two connectors CN1, CN2 are interconnected.

Thereafter, the control part 6 detects the motion of a human body through the signal detected by the body-detecting sensor. According to the movement change, electric power is supplied or intercepted to each interlocked or single-acted appliance so that the ~~multi-tap~~ ~~(concent)~~ outlet strip is controlled as the standby or power saving state.

Please amend the last paragraph on page 19 and ending on page 20 as follows:

The control part 6 receives the on/off signals ~~from~~ of the switches SW1-SW5 of the motion condition setting part 3 through the respective terminals and perceives which auxiliary ~~lead-in-hole~~ outlet(s) is/are is interlocked or single-acted.

Please amend page 20, paragraphs 1-4 (ending on page 21), as follows:

Also, the control part 6 receives the on/off signal ~~offrom~~ from the switch SW6 through the terminal MEN and determines whether to receive the detection signal only from the illumination sensor or from both the illumination and the body-detecting sensors.

Also, the control part 6 receives the on signal of the terminal CT1 when the ~~main lead-in hole~~ main outlet CON1 is connected by an appliance, so that it perceives that the ~~main lead-in hole~~ main outlet CON1 is being used.

On the contrary, the control part 6 receives the off signal of the terminal CT1 when the ~~main lead-in hole~~ main outlet CON1 is not connected ~~by~~ to any appliance, so that it perceives that the ~~main lead-in hole~~ main outlet CON1 is not being used. Accordingly, in this case, the ~~multi-tap~~ ~~(concent)~~ outlet strip operates under single-acting control only, which is perceived by the control

part 6. The on/off signal of the terminal CT1 is transferred from a first current detecting circuit 5A which will be explained later regarding the detail circuit diagram of the current detecting part of FIG. 8.

As explained above, the control part 6 is initially set by receiving the on/off signal ~~regarding the use of~~from the sensor through the terminal MEN, and by receiving the on/off signal ~~regarding~~corresponding to the option of interlocking or single-acting function through the switches SW1-SW5.

Please amend page 21, paragraphs 1-3 (ending on page 22) as follows:

After the initial setting, the control part 6 performs the control to induce each appliance to a standby or power saving state, by the following process: detecting the change of illuminance and the movement of a human body by the on/off signal inputted to the terminals CDS, IRS; detecting the variation of the current flowing into each appliance, which is interlocked or single-acted and connected to auxiliary lead-in hole CON2-CON6, by the current detecting part 5; ~~receiving as the signal according to the~~ detection signal through the terminals CT2-CT6; and outputting the on/off control signal to the output control part 7.

~~Herein, after the control part 6 perceives the sensor to be inputted according to the on/off signal of the switch SW6, if any~~neither of the two sensors ~~does not~~ perceives the change of illuminance nor the body motion, the control part 6 activates the built-in timer to control the appliance within the standby or power saving state.

The operation of the control part 6 is performed by comprehensively determining the on/off signals transferred from each of the terminals SW1-SW5, MAIN, MEN, CT2-CT6, CLOCK, CDS, IRS, and by finally inputting the on/off control signal to the output control part 7. At this time, the relays built in the output control part 7 ~~is~~are connected or disconnected according to the on/off control signals so that the power current flowing into the appliance connected to each lead-in hole CON1-CON6 can be supplied or intercepted. This will be more explained in the detail circuit diagram of the output control part of FIG. 8.

Please amend page 22, paragraphs 4-6 (ending on page 23), as follows:

The ~~main lead-in hole~~main outlet CON1 is connected to an appliance for interlocking

control such as the mainframe of a computer. Herein, the first current detecting circuit 5A detects the current flowing to the appliance and outputs the on/off signal according to the use of the appliance for interlocking to the terminal MAIN of the control part 6 through the circuit CT1. Such operation is conducted at the initial setting stage of the control part 6.

Meanwhile, the ~~auxiliary lead-in holes~~ auxiliary outlets CON2-CON6 are connected ~~by~~ to the appliances such as the peripherals of a computer or the individually operating appliances.

Thereafter, if the control part 6 perceives the illuminance change or the body motion or the built-in timer operates to control the appliance ~~as~~ in the standby or power saving state, the first to sixth current detecting circuits 5A-5F detect the variation of the current flowing through the appliances, which are led into each lead-in hole CON1-CON6, and input the detection signals to the terminals MAIN, CT2-CT6 of the control part 6. Herein, the operations regarding a current transformer CT11-CT16, a comparator U2, and a transistor Q13-Q18, which are built in the first to sixth current detecting circuits 5A-5F, are omitted since they are apparent to those skilled in the art.

Please amend page 23, paragraphs 1-3 (ending on page 24), as follows:

The sixth current detecting circuit 5F has a current adjusting switch 5-1 therein. By means of the current adjusting switch 5-1, the user can adjust the current value depending on the capacity of each appliance so that the ~~multi-tap (concent)~~ outlet strip can be compatible with various appliances with different capacities. For example, with a ~~multi-tap (concent)~~ outlet strip set by a single current capacity, a computer and a battery charger for a mobile phone handset cannot be used without adjusting the capacity since they have different capacities.

Thus, according to the adjustment of the current adjusting switch 5-1, the amplifying rate of the current flowing to ~~the~~ each appliance varies. The on/off control signal according to the variation is transferred to the control part 6. The control part 6 can output an appropriate control signal to each appliance even though the appliances with have different capacities ~~is inputted~~.

Although it is not shown in the drawings, a current detecting sensor (not shown) detects the current of each appliance, which is being used, before the current adjusting switch 5-1 is operated. Thereafter, the control part 6 may adjust the current adjusting switch 5-1 in compliance with the capacity of each appliance. Herein, the current detecting sensor can be freely

installed at the socket of the multi-tap (concent), at the side of each lead-in hole, etc., at the discretion of the manufacturer or by the user's preference.

Please amend page 24, fourth and fifth paragraphs (ending on page 25), as follows:

The first to sixth output control part circuits 7A-7F receive the on/off control signal according to the control operation of the control part 6 to induce the appliance to a standby or power saving state. ~~According to the state, the~~ The built-in relay elements are is connected or disconnected so that the current flowing to ~~the~~each appliance, which is led into each lead-in hole CON1-CON6, can be supplied or intercepted.

Hereinafter, a serial control process of the ~~multifunctional multi-tap (concent)~~ of ~~intercepting a stand-by electric power~~multifunctional outlet strip for intercepting a stand-by electric power according to the present invention will be explained.

Please amend page 25, paragraphs 1-4 (ending on page 26), as follows:

FIG. 9 is a motion flow chart showing a control method of the ~~multifunctional multi-tap (concent)~~ of ~~intercepting a stand-by electric power~~multifunctional outlet strip for intercepting a stand-by electric power according to the present invention, if an illumination sensor is used. FIG. 10 is a motion flow chart showing a control method of the ~~multifunctional multi-tap (concent)~~ of ~~intercepting a stand-by electric power~~multifunctional outlet strip for intercepting a stand-by electric power according to the present invention, if an illumination sensor and a body-detecting sensor are used at the same time.

The control part 6 receives an on/off signal according to the user's switching of SW6 ~~operation~~ to determine whether the control is to be made by using only the illumination sensor or both the illumination sensor and the body-detecting sensor at the same time.

With reference to FIG. 9, if only the illumination sensor is used, the control process of the ~~multifunctional multi-tap (concent)~~ of ~~intercepting a stand-by electric power~~multifunctional outlet strip for intercepting a stand-by electric power according to the present invention is as follows.

First, an illumination sensor 4A of the sensor part 4 detects a change of illuminance [S10]. If the change of illuminance is not detected, i.e., there is no illuminance change, the timer

built in the control part 6 operates for a predetermined time period to control an interlocked or single-acted appliance ~~as in~~ a standby or power saving state [S11]. At this time, the predetermined time period can be set as the most efficient time for the power saving purpose.

Please amend page 26, paragraphs 1-4 (ending on page 27) as follows:

Thereafter, the timer determines that the predetermined time period has passed [S12]. As a result of the determination of S12, if a change of illuminance is detected before the predetermined time period has passed, then the control part 6 clears the timer [S13], and puts the ~~main lead-in hole~~main outlet CON1 as a standby state [S14].

If the ~~main lead-in hole~~main outlet CON 1 for interlocking function is not used, only the ~~auxiliary lead-in holes~~auxiliary outlets CON2-CON6 are ~~detected~~monitored to determine whether they are used under interlocking or single-acting control. However, the control method of the present invention is confined to where the ~~main lead-in hole~~main outlet CON1 is interlocked with at least one auxiliary lead-in hole CON2-CON6.

Thereafter, the control part 6 determines which ~~auxiliary lead-in holes~~auxiliary outlets CON2-CON6 are interlocked or single-acted [S15]. The determination is made based on the on/off signal which is transferred to the terminals SW1-SW5 from the motion condition setting part 3 according to the user's switching operation.

~~As a result of S15,~~ if a predetermined number of the ~~auxiliary lead-in holes~~auxiliary outlets CON2-CON6 are used with interlocking control, the control part 6 determines whether the ~~main lead-in hole~~main outlet CON 1 is being used at present [S16]. The determination is made based on the on/off signal of the terminal CT1 which depends upon the variation of the current of the current detecting part 5.

Please amend page 27, paragraphs 1-3 (ending on page 28) as follows:

~~As a result of S16,~~ if the ~~main lead-in hole~~main outlet CON1 is presently being used, the control part 6 turns on all the predetermined number of the interlocked ~~auxiliary lead-in holes~~auxiliary outlets [S17]. To perform this operation, the control part 6 outputs the on/off control signal to the relays of the output control part 7. In other words, since the ~~main lead-in hole~~main outlet CON1, which is ~~under~~in the standby state, is presently being used, the

predetermined number (or all) of the ~~auxiliary lead-in holes~~auxiliary outlets, which are interlocked with the ~~main lead-in hole~~main outlet CON1, are controlled to be on (standby state).

However, as the result of S16, if the ~~main lead-in hole~~main outlet CON1 is not being used at present, the control part 6 turns off all the predetermined number of the interlocked ~~auxiliary lead-in holes~~auxiliary outlets [S18]. Consequently, since the ~~main lead-in hole~~main outlet CON1, which has been under the standby state, is presently not being used, the predetermined number (or all) of the ~~auxiliary lead-in holes~~auxiliary outlets, which are interlocked with the ~~main lead-in hole~~main outlet CON1, are controlled to be off (power saving state).

Meanwhile, ~~as a result of S15~~, if a predetermined number of the ~~auxiliary lead-in holes~~auxiliary outlets CON2-CON6 are used with single-acting control, the control part 6 turns off all the single-acted ~~auxiliary lead-in holes~~auxiliary outlets [S19]. This is independently performed by the control part 6 separately from the standby state of the ~~main lead-in hole~~main outlet CON1.

Please amend page 28, paragraphs 2-5, as follows:

~~As a result of S12~~, ~~if~~ the predetermined time period has passed, the control part 6 determines which ~~auxiliary lead-in holes~~auxiliary outlets CON2-CON6 are interlocked or single-acted [S20]. ~~As a result of S20~~, ~~if~~ a predetermined number of the ~~auxiliary lead-in holes~~auxiliary outlets CON2-CON6 are used with interlocking control, the control part 6 determines whether the ~~main lead-in hole~~main outlet CON 1 is being used at present [S21].

As a result of S21, if the ~~main lead-in hole~~main outlet CON1 is presently being used, the control part 6 turns on all the predetermined number of the interlocked ~~auxiliary lead-in holes~~auxiliary outlets including the ~~main lead-in hole~~main outlet CON1 [S22].

However, as a result of S21, if the ~~main lead-in hole~~main outlet CON1 is not being used at present, the control part 6 turns off all the predetermined number of the interlocked ~~auxiliary lead-in holes~~auxiliary outlets including the ~~main lead-in hole~~main outlet CON1 [S18].

Consequently, through such a process [S20-S23], the ~~main lead-in hole~~main outlet CON1 and the ~~auxiliary lead-in holes~~auxiliary outlets interlocked with the ~~main lead-in hole~~main outlet

are all controlled to be on (standby state) or off (power saving state).

Please amend page 29, paragraphs 1-5 (ending on page 30), as follows:

Meanwhile, as a result of S20, if a predetermined number of ~~auxiliary lead-in holes~~auxiliary outlets are only single-acting, i.e., if a predetermined number of ~~auxiliary lead-in holes~~auxiliary outlets are individually used while the ~~main lead-in hole~~main outlet CON1 is not being used, the control part 6 determines whether the predetermined number of the ~~auxiliary lead-in holes~~auxiliary outlets which are single-acting are presently being used [S24]. This determination is made based on the on/off signal of the terminal ct2-CT6 which depends on the variation of the current of the current detecting part 5.

As a result of S24, ~~if~~ the predetermined number of the single-acting ~~auxiliary lead-in holes~~auxiliary outlets are presently being used, the control part 6 turns on all the predetermined number of the ~~auxiliary lead-in holes~~auxiliary outlets [S25]. To perform this operation, the control part 6 outputs the on/off control signal to the relay of the output control part 7.

However, as a result of S24, if the predetermined number of the single-acting ~~auxiliary lead-in holes~~auxiliary outlets are not being used presently, the control part 6 turns off all the predetermined number of the ~~auxiliary lead-in holes~~auxiliary outlets [S26].

Consequently, through such a process [S24, S25, S26], the ~~auxiliary lead-in holes~~auxiliary outlets which are single-acting are all controlled to be on (standby state) or off (power saving state).

The ~~main lead-in hole~~main outlet CON1 and the ~~auxiliary lead-in holes~~auxiliary outlets CON2-CON6, which are controlled in a power saving state or a standby state, repeat the above control process by the control part 6 which controls and determines according to the change of illuminance.

Please amend page 30, paragraphs 1-4 (ending on page 31), as follows:

Next, if the illumination sensor and the body-detecting sensor are used at the same time, the control process of the ~~multifunctional multi-tap (concent) of intercepting a stand-by electric power~~multifunctional outlet strip for intercepting a stand-by electric power according to the present invention is as follows.

First, an illumination sensor 4A of the sensor part 4 detects a change of illuminance or a movement of a human body [S30]. If the change of illuminance or the body movement is not detected, the timer built in the control part 6 operates for a predetermined time period to control an interlocked or single-acted appliance as in a standby or power saving state [S31]. At this time, the predetermined time period can be set considering the most efficient mode for the power saving purpose.

Thereafter, the timer determines that the predetermined time period has passed [S32]. ~~As a result of the determination of S32, if~~ If a change of illuminance or a body motion is detected before the predetermined time period has passed, then the control part 6 clears the timer [S33], and puts the ~~main lead-in hole~~ main outlet CON1 in a standby state [S34].

The following process S35-S46 for the control is omitted since ~~they are~~ it is the same as the process in S15-S26.

Please amend page 31, paragraphs 1-3, as follows:

As described so far, the ~~multifunctional multi tap (concent) of intercepting a stand-by electric power~~ multifunctional outlet strip for intercepting a stand-by electric power according to the present invention has the illumination sensor or the body-detecting sensor to detect the illuminance change or body movement around each lead-in hole which is under interlocking or single-acting control, has the control part to control each lead-in hole as in a standby or power saving state according to the interlocking or single-acting condition by ~~determining~~ monitoring the detected signal, and is compatible with various appliances with different capacity by adjusting the electric current according to the respective appliances.

While the ~~multifunctional multi tap (concent) of intercepting a stand-by electric power~~ multifunctional outlet strip for intercepting a stand-by electric power and the control method of the present invention have been described with reference to a preferred embodiment thereof, it will be understood by those skilled in the art that various changes or modifications may be made therein without departing from the spirit and scope of the invention.

For example, for the sensor part 4, a phototransistor, other light sensor, a sound sensor, or a heat sensor can be used in addition to the CDS sensor or the infrared sensor. Also, ~~some of~~

the multiple sensors can be used at the same time.

Please amend page 32, paragraphs 2-4 (ending on page 33), as follows:

As explained, the ~~multifunctional multi-tap (concent) of intercepting a stand-by electric power~~ multifunctional outlet strip for intercepting a stand-by electric power performs an interlocking control of the subordinated appliances by means of the illumination sensor or the body-detecting sensor.

Also, the ~~multifunctional multi-tap (concent) of intercepting a stand-by electric power~~ multifunctional outlet strip for intercepting a stand-by electric power according to the present invention has the illumination sensor or the body-detecting sensor, which is compatible with various appliances with different capacities by adjusting the electric current according to the respective appliances.

Also, the ~~multifunctional multi-tap (concent) of intercepting a stand-by electric power~~ multifunctional outlet strip for intercepting a stand-by electric power according to the present invention detects the illuminance change or body movement around each lead-in hole which is under interlocking or single-acting control by the illumination sensor or the body-detecting sensor, and controls each lead-in hole as in a standby or power saving state ~~according to the interlocking or single-acting condition by the control part determining the detection signal.~~